EPI Update for Friday July 21, 2006 Center For Acute Disease Epidemiology Iowa Department of Public Health

Items for this week's EPI Update include:

- Avoiding health problems associated with summer heat
- Syphilis Cases Remain at Increased Levels
- Rabies: AVOID VACCINATE EDUCATE CALL
- You Think It's Cooked But It's Not Salmonella
- 24 Percent of All Disease Caused by Environmental Exposure
- Announcements/Upcoming Meetings

Avoiding Health Problems Associated With Summer Heat

With temperatures in the triple digits and heat advisories in effect, the Iowa Department of Public Health (IDPH) would like to remind Iowans to take measures to avoid serious health problems associated with summer heat. Serious health complications from heat include exhaustion, stroke and dehydration.

Heat exhaustion occurs when sweating, the body's cooling system, fails to eliminate heat fast enough. The first signs of heat exhaustion are faintness, rapid pulse, and flushing or reddening of the skin, often accompanied by stomachache or headache. When heat exhaustion symptoms occur, you should stop all activity and drink liquids such as water or rehydrating fluids (Gatorade, Powerade, or for children, Pedialyte). Do not drink alcohol, coffee, or caffeinated soft drinks. If possible, take a cool shower.

Heat stroke, a more serious and potentially deadly situation, is commonly associated with confusion on the part of the affected person, who may also stop sweating. In this situation, seek medical help immediately. While waiting for help, the person needs to be cooled, or if possible, taken to a cooler environment.

Dehydration occurs as a contributing factor and comes when fluid and sodium lost by sweating are not replaced quickly enough. A person should continually drink fluids and not wait until thirsty because thirst is a sign of dehydration. It's important to maintain fluids by drinking two to four glasses of cool water or fluids an hour.

Syphilis Cases Remain at Increased Levels

The number of people with syphilis infections is increasing in north central Iowa. Two clusters of syphilis cases remain under investigation and continue to expand. The persons infected are reporting primarily heterosexual transmission. Since some of the people who have been exposed to this infection are traveling, all health providers in Iowa should be vigilant. The spread of infection beyond north central Iowa (including across state lines) is suspected.

Syphilis is passed from person to person through direct contact with a syphilis sore. Sores occur mainly on the external genitals, vagina, anus, or in the rectum. Sores also can occur on the lips and in the mouth. Transmission of the organism usually occurs during vaginal, anal, or oral sex. Pregnant women with the disease can pass it to the babies they are carrying (http://www.cdc.gov/std/STDFact-STDs&Pregnancy.htm). Syphilis cannot be spread through contact with toilet seats, doorknobs, swimming pools, hot tubs, bathtubs, shared clothing, or eating utensils.

Many people infected with syphilis do not have any symptoms for years, yet remain at risk for late complications if they are not treated. Although transmission appears to occur from persons with sores who are in the primary or secondary stage of disease, many of these sores are unrecognized. Thus, most transmission is from persons who are unaware of their infection.

Long acting benzathine penicillin G, administered parenterally, is the recommended drug for all stages of syphilis. Late stages require longer periods of treatment. There can be confusion regarding long acting benzathine penicillin G. The sole manufacturer of the appropriate treatment is King Pharmaceuticals, Inc. The label of the appropriate treatment reads Bicillin® L-A. Sexual partners exposed within the 90 days preceding the diagnosis of primary, secondary, or early latent syphilis should be treated presumptively, even if seronegative. An HIV test is also recommended.

A public health bulletin for clinicians and handouts for positive patients are located on the IDPH web site at: http://www.idph.state.ia.us/adper/std_control.asp. Additional information about syphilis can be located on the CDC web site at http://www.cdc.gov/std/Syphilis/STDFact-Syphilis.htm.

Rabies: AVOID - VACCINATE - EDUCATE - CALL

Now that warm weather is here and people and pets are spending more time outdoors, the chances of an animal encounter have also increased. Here are some basic tips to prevent a possible rabies exposure and the need for rabies post-exposure treatment:

Avoid - Do not feed or approach wildlife on your property, at parks, or when walking in the woods or rural areas. When walking your dog, always keep it on a leash and under your control. Do not take any wild or stray animal home as a pet. Inspect your property and take appropriate measures to prevent wildlife from finding shelter or food sources on your premises.

Vaccinate - Consult your veterinarian and have valuable livestock, horses, and companion animals (i.e., dogs and cats) vaccinated against rabies and keep their rabies vaccination current. Every year there are more cats infected with rabies than dogs in the U.S.

Educate - Teach yourself and your children how to avoid being bitten by an animal. Stay away from wildlife and don't attempt to pet stray dogs or cats, or dogs or cats that are not familiar to you. Do not attempt to help injured animals. Contact your local

animal control agency to report strays or injured animals. Children should inform their parents if they are scratched or bitten by any animal. Animal control officers or other appropriate authorities should capture wildlife and perform humane euthanasia and submission for rabies testing. A dog, cat, or ferret that is outwardly normal, whether the animal is vaccinated or not, that has bitten a person, can usually be quarantined for observation for 10 days by their owner, or when warranted, at an animal control facility or veterinarian's clinic / hospital. If the animal is normal after 10 days, it was not secreting rabies virus in its saliva at the time of the bite, thus no rabies post exposure prophylaxis would be recommended. Healthcare providers should know which local agency is responsible for animal bite follow-up in their jurisdiction.

Call - Notify your healthcare provider if you are bitten by an animal. IDPH is available 24 / 7 for consultation for rabies exposure assessment and post-exposure treatment recommendations. During normal business hours, contact Dr. Susan L. Brockus, State Public Health Veterinarian, at 515-281-4933; after business hours, weekends, and holidays call 800-362-2736 for referral to the on-duty officer.

Information on rabies is also available on IDPH's Web site in the Epi Manual at: http://www.idph.state.ia.us/adper/surveillance_manual.asp Rabies exposure assessment flow charts are available at the end of the epi manual chapter on rabies or by typing rabies into the google search engine within the IDPH Web site. Printed copies of the flow charts are available through the state clearinghouse at 888-398-9696. Additionally, the CDC has a Web site on rabies available at: http://www.cdc.gov/ncidod/dvrd/rabies/>.

You Think It's Cooked But It's Not - Salmonella

Since March, the Iowa Department of Public Health along with the CDC and other state health departments have been investigating an ongoing national cluster of human *Salmonella enteriditis* cases that have been linked to eating frozen microwavable entrees that contain raw chicken that may be stuffed or filled. Iowa has linked 3 cases so far to this cluster with several other investigations ongoing. Microwaveable stuffed chicken products such as chicken kiev, cordon bleu, broccoli & cheese, shrimp & crab and others are being looked at in the investigation.

The U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) issued a public health alert on July 3, 2006 regarding illnesses associated with a class of frozen entrees that contain raw chicken. The alert focuses on frozen, breaded, boneless chicken products that may also be stuffed or filled and appear browned, but are raw and must be cooked to a minimum internal temperature of 165°F. Consumers may not realize that the breading on these products has only been pre-browned and these frozen entrees contain raw chicken. Assuming that the product has been pre-cooked, consumers may not be following cooking instructions or because of the variability of microwave ovens, the instructions may not yield a product that reaches an internal minimum temperature of 165°F. Thus any bacteria contained in the chicken might not be killed.

FSIS is requiring that the manufacturers of these products ensure that new labels clearly state that these products contain raw chicken and must be fully cooked to a minimum

internal temperature of 165°F. For additional information go to http://www.fsis.usda.gov/News_&_Events/NR_070306_01/index.asp

24 Percent of All Disease Caused by Environmental Exposure

According to a recent WHO report, as much as 24 percent of global disease is caused by environmental exposure which could be avoided. Further estimates show that 33 percent of disease in children under the age of five is caused by environmental exposures. This is the most comprehensive and systematic study undertaken on how preventable environmental hazards contribute to a wide range of diseases and injuries. By focusing on the environmental causes of disease, and how various diseases are influenced by environmental factors, the analysis breaks new ground in understanding the interactions between environment and health. The estimate reflects how much death, illness and disability could be realistically avoided every year as a result of better environmental management.

The four main diseases caused by poor environmental management are:

- □ diarrhea,
- □ lower respiratory infections,
- unintentional injuries, and
- □ malaria.

Environmental measures that could be taken to lower the death rates cause by these diseases are

- □ safe water for drinking,
- □ encouraging good hygiene,
- □ the use of cleaner and safer fuels, and
- a careful management of toxic substances in the home and workplace.

For addition information visit:

http://www.medicalnewstoday.com/medicalnews.php?newsid=45647&nfid=al

Meeting Announcement and Training Opportunities

August 10, 2006 (8-10:30 a.m. and 11-1:30 p.m. central time) there will be an Immunization Update presented by the CDC. You may participate in this live program through satellite broadcast or Web cast. Anticipated topics include influenza vaccine, pertussis vaccine for adolescents and adults, revised recommendations for hepatitis A vaccination of children and the new vaccines for rotavirus and herpes zoster. Information about HPV may also be included. Please go to: http://www2a.cdc.gov/phtnonline/ for more details.

CADE would like to wish all the RAGBRAI riders a safe and fun week.

Have a healthy and happy week and keep cool. Center for Acute Disease Epidemiology Iowa Department of Public Health 800-362-2736